Economics of the Longest Running Block Game

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2nd Ed.

Abstract

Unlike languages, trade is a method of communication spoken by all. Nearly every currently existing and previous cultures have relied on some form of trade, more often than not having massive impacts on the nature and growth of these societies. Still, one must wonder if trade is learned through culture, or simply based on some inherent human nature driving us subconsciously, dooming us to make the same cyclical mistakes over and over again.

While not a conventional topic by any means, this research seeks to dive into the fascinating economic history of diamonds serving as the primary currency on MinecraftOnline, the world's oldest Minecraft server, drawing parallels to economic principles from the real world. By analyzing data gathered through in-depth interviews with several veteran players who have witnessed the server's economy evolve over several years, this essay provides a unique insider's perspective on several factors that have shaped the diamond-based economy. Looking ahead, the essay also explores the viability of diamonds as a long-term currency standard and considers potential alternative player-driven currencies, informed by the experiences and opinions of these longtime community members. Through this dual approach of combining real-world economic theory and firsthand accounts, the essay offers a comprehensive examination of the past, present, and possible future of MinecraftOnline's unique virtual economy.

Acknowledgements & Issues Encountered

Before getting into the findings of my research, I'd first like to acknowledge the ones who helped me along the way. First and foremost, I'd like to thank the participants who took the time

to sit down and interview me, especially as most were in different time zones than I. The research I have conducted would not be possible without their cooperation, information, and further guidance on the subject. I'd also like to thank the Freedonian Historical Society for access to their book vault, which I filed through in order to find old trade records that aided my research. Additionally, I'd like to thank the owner of the *F.A.D.Ev3* excavation machine, who happily answered my questions surrounding the device on a short notice, despite not originally being scheduled or aware of the interviews. This work was not completed without issue, however. Two participants who had originally agreed to interview dropped out last minute, *(a leading administrator & the richest active player)* leaving me with little time to find interviewees to take their places. In addition to this, one interview's recording came out corrupted and incomplete, however this issue was not present in the others conducted.

Introduction

In the vast digital expanse of MinecraftOnline, an entirely player-driven economic system has been developing and evolving over the span of the past 14 years. What began as a simple virtual game environment devoid of any actual coded currency system or real-world monetary tie-ins has developed into a complex market displaying economic dynamics mirroring those found in actual global markets. From times of hyperinflation to wealth inequality, mass industrialization to dramatic market crashes, the actions of players interacting with this server and each other have inadvertently replicated real world economic events seen in our very own world today. At the center of this digital free market lies the diamond, a formerly rare resource that has somehow evolved from its original practical purposes to become the de-facto standard currency, its value being solely based on a shared perception rather than an instituted declaration

or of practical use. This natural development of a trading/monetary system governed purely by the collective behavior of the traders themselves, rather than by the game's rules or the administrators/pressure from *(in-game)* 'governments', makes MinecraftOnline's economy stand out from others seen in gaming and the real world as a whole. Before beginning this ethnographic study, I had hypothesized that MinecraftOnline's diamond-based economy was headed towards an eventual market crash or hyperinflation event. This hypothesis had stemmed from my background knowledge of several previous incidents that had disrupted the economy, such as wealthy players distributing massive amounts of diamonds, exploits enabling item duplication, and former pay-to-win mechanics that previously allowed players to spawn in unlimited currency. Backed by this hypothesis, my research aimed to properly investigate the economic forces at play and assess the long-term sustainability of MinecraftOnline's unique online economy.

Methodology

This study employs the use of various ethnographic methods, including participant observation and interviews with veteran players to investigate the inner workings of this player-driven economy.Through field observations and key insights, this research will explore the cyclical nature of inflation/deflations, the viability of player-made currencies, and the impacts of events like updates, exploits, and production innovations on this diamond-based economy. The vast majority of my research was conducted via on-call interviews over platforms such as Discord & Instagram, opting to use the preferred method of communication for each interviewee to ensure everything would go smoothly. During the interview process, I spoke to *Azeur*, a server moderator who was the owner and designer of an automatic gold-producing farm

which proved so effective it shook the market to the point of administrative interference, killing off the use of gold as a 'currency'. I also spoke to a former moderator *(4untochrist)*, as well as a player heavily involved in inter-server trading and the production of resource farms *(Abamacus)*, a decently-known Youtube content creator who had previously interviewed members of the community for his videos *(Aidan)*, as well as the builder & designer of a massive automatic excavator that has the possibility of completely changing the game for everyone *(Darkmatter)*. Additionally, interviews had been arranged with the server's *(unofficial)* leading administrator, as well as with the wealthiest player on the server responsible for a previous economic crash; with both ultimately being canceled for separate reasons.

Other research data acquired by me was done so through the combing of archived chat logs of messages sent within the server, a method I used both to verify certain claims made; as well as to expand on certain areas of my collected research. During the entirety of this project, I spent less than an hour in total on the server itself, as the vast majority of my data could already be collected elsewhere. That being said, some of the more obscure aspects of my research were unavailable anywhere else online, requiring me to log on and hunt them down. Data acquired from this method included the documentation of essential modern trade prices, a couple in-game books used as trade records *(2021 and 2019 respectively)*, and a visit to a dormant machine that has the potential to change the economy forever. By using a fusion of ethnographic data and economic principles, the study offers a comprehensive examination of MinecraftOnline's distinctive virtual economy from its origins to its possible future trajectories.

Key Findings

Before we take a look into the bulk of this research's findings, it's important to make sure the terminology used here is understood by the reader, as unlike most other fields, Minecraft economics is not exactly commonplace research. In the worlds of Minecraft, diamonds are a rare, unfarmable mineral that can be mined underground and used to craft powerful gear like pickaxes, swords, and armor. However, on the MinecraftOnline server, the use of diamonds in equipment has become impractical; if not wasteful, as players can acquire 'ranks' that allow the summoning of basic diamond gear. For this reason, diamonds are most often made into 'diamond blocks' *(9 diamonds per block)* which serve as the de facto currency, with wealthier players storing their riches in near-endless chests filled with these blocks. The server has 'moderators' who are players tasked with enforcing rules *(of which I interviewed two current and one former)*, while 'admins' are higher-level staff with control over the server itself. Other terms mentioned include 'duping' which serves as slang for exploits that illegitimately duplicate items, 'collectibles' which are rare limited items, 'God Ranks' which were once a paid premium rank *(using real money)* allowing unlimited item spawning, and 'Megafarms' which are large, automated, factory-like mechanisms capable of producing massive amounts of resources or blocks. Understanding this glossary provides important context for the virtual economy centered around diamond blocks as a currency; an extended and summarized version of this information may be found at the bottom of the page for easy access while reading.

The data pulled from both interviews and trade records suggests that diamonds have undergone an interesting evolution from having practical in-game utility, losing their value on that front while gaining new value as a currency. In the early days of MinecraftOnline, diamonds were prized for their scarcity and necessity in crafting powerful gear that provided very necessary gameplay advantages. In those days *(early 2010's)*, other hard-to-come-by resources

also served as currencies within markets on the server, most notably Emeralds, Iron, and Gold. Old markets were seen to have used more denominations/variations of raw materials traded as currency standards, though each eventually fell from practical use as a currency one by one over the years *(all due to advanced methods of farming those resources)*; leaving the diamond standard all that remains to this day. While this might lead one to believe diamonds would have maintained their value in the place of others *(due to their inability to be automatically farmed)*, it's not that straightforward. Successive game updates over the years have introduced new mining techniques, and server performance improvements have enabled players to acquire diamonds more easily. As time went on, diamonds slowly began to lose their practical use in tools and armor, to today where a full set of basic diamond armor *(costing 24 diamonds to produce)* is only valued at around 2 diamonds on the market.

Perspectives were split on whether this financial transition undermines the reliability of the diamond standard in the long run. Skeptics like Aidan pointed to the supply of diamonds increasing heavily through eras of hyperinflation, to the point where *"something as simple as a few blocks of quartz costed a full diamond."* In contrast, others like Abamacus defended diamonds as immune to inflation, arguing them as *"the 'base' by which you measure value"* specifically because their value has become increasingly symbolic rather than derived from uses. Scarclaw compared diamonds to fiat money we see in the real world, such as the United States Dollar. What this essentially is, according to Scar, is nothing more than a self-reinforcing belief loop. *"Diamonds have value because people think they have value"*

This seemingly symbolic function of diamonds mirrors the foundations of fiat currencies in the real world, which, unlike the gold standard, derive their value from institutions and regulations rather than any physical backings. However, the stabilizing governance and policies

ensuring the longevity of real-world fiat systems are all but absent from MinecraftOnline's diamond standard. As Scarclaw put it, *"the MCO economy could actually crash at any moment if one Old God just decided to log on and get generous" (by introducing massive amounts of supplies into the economy.)* In many ways, the diamond standard has come to represent what is essentially an unregulated, free-market system where value is maintained merely through the collective perception of it, rather than being artificially enforced through any sort of genuine backing or policies. This approach seems to have allowed periods of economic turbulence and unchecked inflation, unlike modern fiat currencies regulated by central banks. Whether this formula can remain stable and trusted as a long-term economic foundation remains to be seen.

Major content updates appear to be the most disruptive to the economy through shifts in supply and demand as certain items become easier/harder to obtain. Several interviewees, most notably 4unto and Scarclaw, pointed to how game version updates tended to devalue once-scarce resources by making them more accessible to obtain or produce. 4unto recounted how after updating to 1.12, diamonds became a little less valuable, as mining them became easier due to a reduction in lag.

Looking forward, future Minecraft updates could significantly impact the economy of the server in several ways, although all remain simply theoretical at this time. The addition of ‘Piglin trading’ feature adding the ability to barter with gold for materials like ‘blackstone’, quartz, and obsidian *(all rare materials)* is very likely to increase the demand for gold, as mentioned by Azeur in the interview. However, the presence of existing public gold farms might balance out this demand, preventing any sort of significant increase in gold's value. On a different branch, the future introduction of Netherite *(a material more powerful than diamonds)*, could potentially shift economic dynamics even further. While diamonds might retain their status as a currency

due to their relative rarity and consistent effort needed to obtain them, Netherite could become a highly sought-after and valuable resource, particularly for its use in crafting stronger tools and armor. This, in addition to the limited amount of Netherite found in any given world could lead to the emergence of Netherite as a parallel currency or a hoarded valuable commodity in its own right, similar to how ‘God Apples’ are treated today.

In addition, any further updates will bring new blocks & other resources that could create new markets and trade opportunities within the server's economy. As mentioned by one participant, the addition of new items often leads to the establishment of shops and businesses catering to the specific demand for these materials. The addition of new resources would also require the creation of new farms in order to produce them, allowing newcomers to enter the market much easier than they could attempt to do today while competing with existing megafarms that beat them to it.

Overall, the upcoming Minecraft updates that MCO will someday receive have the potential to completely shake up the server's economy through new trade opportunities, and changes in the values of existing resources. However, the extent of these changes and their long-term impact will depend on other factors- such as the availability of new resources, the adaptability of the player base to change, and the emergence of new farming and production methods within the server.

The fairly recent boom of ‘mega-farms’ that could mass-produce large amounts of resources automatically proved to be another inflationary force. Aidan reflected that the hyper-industrialization and mass production of formerly expensive goods had effectively *"tanked the market"* by crashing prices of formerly coveted items like building blocks and materials. Abamacus confirmed this to some degree, citing his own public farms as being responsible for

several economic impacts, like reducing the price of Ghast Tears *(brewing ingredient)* from six diamonds to just two.

After receiving a lead from an interviewee post-discussion, I logged into the server itself and made my way to the coordinates I'd been given. When I arrived, I came face to face with something that had the chance to throw a serious wrench into my theories and other participant observations. As I reached the edge of the cliff overlooking the quarry-esque dig site, I was met with the sight of *'F.A.D.Ev3'*, a massive excavation machine unlike anything ever seen on the server, spanning over 150 meters high *(roughly the same height of a real life oil rig.)* After reaching out and getting in contact with the owner, I learned that these machines *(often referred to as 'World Eaters')* had the capability of harvesting ore automatically, including that of diamonds. While the technology as a whole wasn't new, this is the first time a World Eater has made its way onto the server, leaving much speculation on the future impact it could have on the economy. As the strongest argument for the diamond standard is that diamonds must be manually found & collected, this machine and others like it could have the potential to flip the entire economy on its head if fully operational and in consistent use. Unfortunately for my research, the machine has been offline for months, being under repairs by a technician in order to get it operational. When speaking to the owner, even they seemed unsure on the effect machines like these could have on the economy, stating that how the machine will interact with the world after the game gets updated is still unknown, possibly gaining speed as a result of the reduced lag and therefore be able to produce a higher output.

Despite all this, some of the most destabilizing inflationary pressures appeared to stem from exploits and abuses rather than legitimate economic forces. Multiple interviewees like 4unto and Scarclaw referenced hyperinflationary impacts from certain players hacking in illicit

goods and currency through item duplication exploits, and the ‘God Rank’ powers that once allowed unlimited item summoning, including diamonds, for the price of 1,000 Euros *(available 2016-2018)*. As 4unto put it rather bluntly, certain players have attempted to flood the markets with their illegitimately obtained diamonds, which he jokingly compared to the actions of the US Federal Reserve. While some economic fluctuations seemed inevitable from expansions of legitimate resources and production methods, the unregulated nature of MinecraftOnline's diamond economy also left it highly vulnerable to hyperinflationary shocks from illegitimate exploits and abuses of privileged powers. For these reasons, maintaining market stability has emerged as an ongoing challenge in recent years, taken care of mostly behind the scenes today.

As the MinecraftOnline economy evolved over time, a divide emerged between what multiple sources described as the *"lower”* economy and the collectible-based *"higher-end"* market. Scarclaw expanded further on this noticed divergence, claiming *"There's kind of two economies going on at once. There's the newer players/lower level economy, and there's the economy split between the 'New Money' and the 'Old Money.'"* Using real-world social economic terms, Scar explained how he had noticed a difference between how players who had acquired their wealth en-masse during the days of God Ranks, and the ones who had acquired their wealth today through the trade network or the raiding of old world vaults containing diamonds/other resources summoned in illegitimately from that era. ‘Old Money’ players were noted to spend/distribute very little of their remaining resources from the days they were summonable, a factor of which I've noticed myself during my time in the community. This is likely due to internal pressures from the administration team urging them against doing so, as to not harm the economy for players who had to work for what they earned, being both New Money and the ‘common class’ of players, the latter of whom can be found in the lower markets. This

concentration of economic power among the server's upper echelons have enabled them in the past to upend entire markets through coordinated buying sprees or asset unloads. As Abamacus noted, Several players used their wealth to buy up rare items, resulting in higher prices on items such as ‘God Apples’ and ‘Alpha Slabs’. However, the inverse also remained true - a concerted sell-off by multiple ‘big shots’ could result in a price crash for a particular commodity. The ever-present threat of such shocks shows us the inherent volatility and fragile nature of MinecraftOnline's largely unregulated markets.

The lower market, on the other hand, remains centered around common, often farmable goods and resources like food, wood, stone, and even diamonds themselves as a base currency facilitating basic transactions. According to Aidan's observations, most players exist in this lower economic bracket, with the ‘poorest’ amongst them still using diamonds for their intended purposes such as for crafting and repairing gear through manual means. In contrast, the higher-end economy revolved around ultra-rare collectibles, luxury assets like Alpha Slabs and God Apples *(both items of limited quantity, neither have been reproducible for years)* and premium services such as the commissioning of buildings. Entrance into this upper tier today requires one to be in possession of significant concentrations of excess wealth, whether through looting, long-term accumulation or abusive exploits.

This dichotomy between common goods and collectibles/assets has created an interesting dynamic in which the latter became increasingly detached from the lower economy's value metrics. Scarclaw described how collectibles and other highly sought after items only become more valuable/expensive the older they get, even amid inflation devaluing common currencies and resources. In short, the emergence of these parallel economies has solidified the internal divide within the unequal socio-economic landscape of MCO. While the masses participated in

lower markets driven by the basic trading fundamentals of supply and demand, an entirely separate ‘black market’ of trading, gambling, and wealth concentration had taken shape in its shadow.

In addition to looking into the effects of the diamond standard on the market, the research also explores several examples of players attempting to introduce their own alternative currencies, such as the current ‘Renbucks’ system backed by the Emerald Mall or similar historical endeavors like ‘Posabucks’, dating all the way back to 2017. Those in favor saw potential advantages in player-driven currencies having fixed, finite supplies that could possibly even avoid inflation altogether, all while providing more flexible denominational systems beyond just diamonds and diamond blocks.

Aidan, who was developing his own player currency concept, outlined the vision of a currency with denominations of 4 different notes, all pegged to diamond values. If successful, this project could enable more granular pricing and transactions compared to the binary diamonds/blocks. Aidan's system aimed for the new currency to have exchange stations across the world to purchase this currency for diamonds or exchange them in at any time, in order to maintain liquidity and prevent hoarding.

However, several veteran players expressed deep skepticism about the sustainability and technical viability of such parallel currencies long-term. Scarclaw was emphatically against the idea, dismissing Renbucks as "*Just about as fiat of a currency as you can get, because it's player backed; not economy-backed/server-backed."* He argued that once the creator inevitably leaves, *"it's still going to falter and eventually fail in some regard."*

Abamacus highlighted more pragmatic concerns around integrating with systems like LionShop transaction plugins, a server feature used to power automatic, player-run ‘vending

machines' seen across the world, something which currently lack support for authenticating non-fungible traded items with NBT data, something which Non-Standard Currencies rely on for authenticity. *"Unless this plugin changed to support 'authenticated' specific NBT data, I cannot see any player-made currency succeeding long-term,"* he bluntly assessed.

4unto concurred on lacking viability from any currency not being backed by anything of real utility and explicit regulation by admins/staff. Even the backing of Renbucks by a mall reserve did not sway his view that players can effectively profit off them in ponzi-like schemes, likening them to scams pulled by certain banks and institutions in the real world.

While Aidan outlined theoretical benefits around controlled supplies and more flexible denominations beyond the two provided by diamonds, the overall sentiment portrayed player-made currencies as fundamentally unsustainable without serious anti-counterfeiting mechanics, tangible backing of valuable resources, and active governance - inadequacies all inherently tied to their community-driven nature. The lack of technical integration and unguaranteed stability revealed a common consensus that such systems remain non-viable (at least for now) within MinecraftOnline's established economy.

Perhaps the most disruptive events stemmed from abuses of administrative powers and duplication exploits. Multiple sources pointed to periods of hyperinflation from wealthy players like NicholasDiamond flooding the market with illegitimately obtained items acquired from an 'Old Money' God Rank associate. 4unto bluntly compared this to *"the US Federal Reserve doing their number on us"*, referencing inflation seen in the real world. Similarly, Abamacus described how a hacker greatly influenced the market in two directions, originally through summoning illegal items through hacking, then selling these 'impossible' items in an attempt to drain excess diamonds from the economy. The integrity of the diamond standard itself has been repeatedly

called into question due to scandals like these. As Scarclaw lamented, *"I'm honestly surprised a full economic crash hasn't happened yet"* due to such rampant abuse and manipulation of currency supplies by certain players exploiting privileges. From industrial expansions and game-changing updates to insider trading and wholesale deletions of wealth, MinecraftOnline's economic evolution has been shaped by a cluttered patchwork of technological forces, staff governance decisions, and individual schemes of many natures.

The evolution of player-run ‘malls’ and trading systems has played a significant role in shaping the economy of the world's oldest Minecraft server. As the community grew, players recognized the need for organized trading hubs, leading to the emergence of malls like the Diamond Mall *(created by the staff team, used by the community)* and, more recently, the Emerald Mall, run entirely by a single player. These player-run establishments facilitated the exchange of goods and services, allowing players to specialize in specific trades and contribute to a diverse economic ecosystem.

Major economic events have also had profound impacts on the server's economy. One such event was the nerfing of the ‘God Rank’, which previously allowed players to spawn in unlimited resources, essentially creating a pay-to-win dynamic. This change was a turning point, as it eliminated the influx of illegitimately obtained resources and promoted a more balanced economy based on player efforts and resource scarcity.

Another significant event was the introduction of Azuer's gold farm, which led to a major influx of gold into the economy. Initially, gold could be converted into diamonds or iron through a staff-created converter system at the old MineMart Mall, causing an imbalance in the relative values of these resources. The server's administration recognized this issue and removed the conversion system, leading to a sharp increase in the value of gold relative to diamonds and iron,

reshaping the economic landscape. These events, along with others like the emergence of new collectibles, the industrialization of resource production through mega-farms, and the occasional influx of resources from wealthy players or cheaters, have all contributed to the dynamic and ever-evolving nature of the server's economy. The resilience and adaptability of the player base in navigating these changes have been crucial in maintaining a thriving and sustainable economic system within the server.

Takeaways

While the real-world importance of any of this is questionable at best, the resilience demonstrated by MCO's simulated economic systems in the face of hyperinflation, counterfeiting scandals, and other disruptive events offers a unique case study for analyzing the adaptability and self-correcting mechanisms present in free market economies.

In conclusion, the unique virtual economy of MCO offers a fascinating lens into how economic systems can emerge and evolve through the collective actions of their participants, mirroring many of the same dynamics seen in real-world markets. What began as a sandbox environment devoid of any coded currency system has developed into a complex, multi-faceted economy centered around the diamond standard - a self-perpetuating 'value loop' underpinned more by shared perceptions rather than inherent utility. While disruptive forces like exploits, abuse of privileges, and industrial expansions have led to periods of economic turbulence, the system's resilience and the adaptability of its participants have allowed it to survive . Looking ahead, game-changing innovations like 'World Eater' machines and future updates introducing new resources pose uncertainties around sustainability, sparking existential debates over solutions like non-standard currencies. Ultimately, MinecraftOnline's unregulated economy

stands as an intriguing case study into the complexities of value, currency, and how the invisible hand of the market can take shape even within the digital world.

GLOSSARY

DB Standard	Refers to the use of diamonds and diamond blocks *(crafted from 9 diamonds)* as currency.
Alpha Slabs	Non-producible for over a decade, this item has no practical applications but has remained in the public eye as a result of their declining numbers.
God Apples	Non-reproducible since early 2021, dwindling in number yet highly coveted for their use in combat situations.
Megafarms	Massive, factory-like farms, producing anything from crops to building resources.
Emeralds, Gold, Iron	All natural resources formerly used as currency, each phased out as they became farmable.
Non-Standard Currency	Refers to any player-made currency deviating from the diamond standard
Moderator	Works under administrators of the staff team to ensure players follow the rules
Administrator	Leads the staff team, in charge of updating the server and keeping it alive

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